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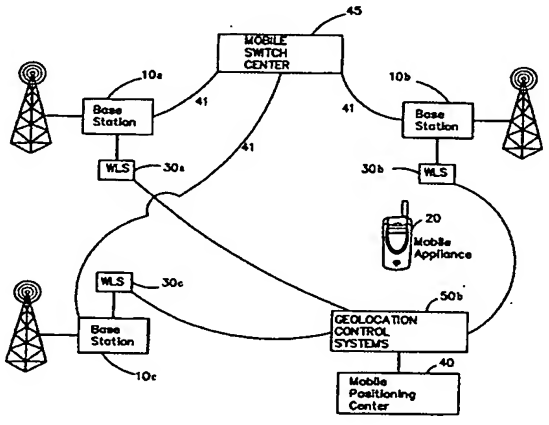
(54) Title: NETWORK OVERLAY LOCATION SYSTEM AND METHOD FOR AIR INTERFACE WITH FREQUENCY HOPPING



(57) Abstract: Embodiments of a system and method are disclosed that enable geo-location of a mobile appliance (20) communicating over a frequency hopping air interface for a network overlay geolocation system having plural wireless location sensors (30). The wireless location sensors (30) include a radio receiver channel capable of receiving the forward channels of the air interface transmitted from the base station (10) to the mobile appliance (20). The network overlay geo-location system of the present disclosure monitors these forward channels and measures parameters that allow the geolocation system to synchronize with the hopping of the air interface on the reverse channel. The plurality of sensors measure an attribute of a signal on the reverse channel to thereby enable geo-location. Synchronization can also be reference to a stable system clock and the plurality of sensors may be tuned in reference to the system clock to enable measurement of the frequency hopping reverse channel.

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